

What is claimed is:

1. In a process for producing concrete molded blocks having two different layers of material which are placed in a mold cavity of a vertically movable mold having substantially vertical side walls, a top pressure plate which can be moved vertically to close the mold cavity and a vertically movable bottom plate, the steps comprising:

(a) moving the bottom plate upwardly into the mold cavity into a position corresponding to the desired height of the concrete block, locking the bottom plate in such vertical position and adding a first layer of material into the mold,

(b) precompacting the first layer of material between the mold top plate and the mold bottom plate,

(c) filling the mold cavity with a second layer of material,

(d) compacting the first and second layers of material between the mold top plate and the mold bottom plate,

(e) moving the bottom plate horizontally from the mold area and removing the finished concrete block from the mold.

2. The process as claimed in claim 1 wherein after adding the first layer of material moving the bottom plate and first layer downwardly to a height corresponding to the desired thickness of a second layer and moving the top plate downwardly against the first layer.

3. The process as claimed in claim 1 : wherein after precompacting raising the top pressure plate to enable the second layer of material to be added to the mold cavity.

4. The process as claimed in claim 1 wherein after adding the second layer of material moving the top pressure plate and bottom plate with the first and second layers therebetween to position the top surface of the bottom plate immediately below the bottom edge of the mold cavity.

5. The process as claimed in claim 1 and the step of moving the bottom plate into a second vertical position only after precompacting of the first layer of material.

6. An apparatus for producing a concrete molded block having two different layers of material comprising a stripper plate having a top surface and means for vibrating said stripper plate, there being an opening in said top surface of said stripper plate, a mold having a mold cavity with substantially vertical side walls and positionable upon the top surface of said stripper plate, means for vertically moving said mold,

a top pressure plate movable vertically to close the top of said mold cavity, a bottom plate vertically movable through said opening in said top surface of said stripper plate to close the bottom of said mold cavity.

7. An apparatus as claimed in claim 6 wherein said means for vibrating said stripper plate comprises a vibrating table upon which said stripper plate is supported.

8. An apparatus as claimed in claim 6 and further comprising a vertically movable box disposed below said mold cavity and said stripper plate defining a top surface of said box, said bottom plate mounted on said box extending through the opening in said stripper plate and vertically movable with said box, and means attached to said box by moving said box and the attached bottom plates horizontally out of the area of said mold.

9. An apparatus as claimed in claim 8 and further comprising a vertically movable horizontal support member mounted within said box, said bottom plates mounted on said horizontal support member, and a drive unit mounted on said box and connected to said horizontal support member such as to move said support within said box.

10. An apparatus as claimed in claim 8 and

further comprising means for vibrating said box, and means for moving one of said box or stripper plate horizontally and then vertically upwardly a predetermined amount sufficient to enable a frame board to be positioned upon said vibrating table.